INTERNATIONAL SEARCH REPORT

Interional Application No PCT/US2004/038016

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H01J29/88 H01J H01J9/20 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 H01J Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages Category ° 1,3,9 US 5 693 259 A (OTAKI ET AL) X 2 December 1997 (1997-12-02) columns 6,7,9,10, lines 1-21,45-47,64-67 EP 0 458 504 A (ACHESON INDUSTRIES, INC.,) 1,9 Υ 27 November 1991 (1991-11-27) page 3 - page 7 1.9 US 4 760 310 A (DEYAMA ET AL) Y 26 July 1988 (1988-07-26) column 6, paragraph 2; claim 1 Patent family members are listed in annex. Further documents are listed in the continuation of box C. *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the levelter. Special categories of cited documents: *A* document defining the general state of the art which is not considered to be of particular relevance invention "X" document of particular relevance; the claimed Invention cannot be considered novel or cannot be considered to "E" earlier document but published on or after the International filing date involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-O document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. other means document published prior to the International filing date but later than the priority date claimed *&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 26/07/2005 4 July 2005 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Ruiz Perez, S Fax: (+31-70) 340-3016

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